Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1. (currently amended) [[A]] An isolated biopolymer marker ~~selected from the group having a sequence identified as SEQ ID NO.1, SEQ ID NO.2, SEQ ID NO.3, SEQ ID NO.4, SEQ ID NO.5,SEQ ID NO.6, SEQ ID No.7 or at least one analyte thereof useful in indicating at least one particular disease state~~ peptide consisting of SEQ ID NO:3 diagnostic for Alzheimer's disease.

Claims 2-38. (cancelled)

Claim 39. (new). A method for diagnosing Alzheimer's disease comprising:

(a) obtaining a sample from a patient;

(b) conducting mass spectrometric analysis on said sample in a manner effective to maximize elucidation of discernible peptide fragments contained therein; and

c) comparing mass spectrum profiles of a peptide consisting of SEQ ID NO:3 to mass spectrum profiles of peptides elucidated

from said sample; wherein recognition of a mass spectrum profile in the sample displaying the characteristic profile of the mass spectrum profile for the peptide consisting of SEQ ID NO:3 is diagnostic for Alzheimer's disease.

Claim 40. (new). The method of claim 39, wherein the sample is an unfractionated body fluid or a tissue sample.

Claim 41. (new). The method of claim 39, wherein said sample is selected from the group consisting of blood, blood products, urine, saliva, cerebrospinal fluid, and lymph.

Claim 42. (new). The method of claim 39, wherein said mass spectrometric analysis is selected from the group consisting of Surface Enhanced Laser Desorption Ionization (SELDI) mass spectrometry (MS), Maldi Qq TOF, MS/MS, TOF-TOF, ESI-Q-TOF and ION-TRAP.

Claim 43. (new). The method of claim 39, wherein said patient is a human.

Claim 44. (new). An Alzheimer's disease diagnostic kit comprising: (a) a peptide consisting of SEQ ID NO:3, and (b) and antibody that binds to said peptide in a sample from a patient.

Claim 45. (new). The diagnostic kit of claim 44, wherein said antibody is immobilized on a solid support.

Claim 46. (new). The diagnostic kit of claim 44, wherein said antibody is labeled.

Restriction/Election

Restriction to one of the following inventions has been required under 35 USC 121:

I. Claims 1-2 are drawn to a biopolymer consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6 or SEQ ID NO:7 classified in class 530, subclass 300 or class 530, subclass 350 for example.

II. Claims 3-9 are drawn to mass spectrometric analyses to identify or detect SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4,SEQ ID NO:5, SEQ ID NO:6 or SEQ ID NO:7 in a patient sample, classified in class 435, subclass 7.1 for example.

III. Claims 29-32 are drawn to antibodies that bind SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5,SEQ ID NO:6 or SEQ ID NO:7 classified in class 530, subclass 387.1/387.2 and class 424, subclass 130.1 for example.

IV. Claims 10-28 and 33-38 are drawn to kits/methods which not only detect SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6 or SEQ ID NO:7 but further requiring a correlation to disease state, diagnosing, therapeutic avenues, an/or risk assessment, classified in class 436, subclass 518 and class 424, subclass 93.1 for example.

The Examiner has also required a Sequence Election Requirement applicable to all groups.

In addition, each detailed Group above reads on patentably distinct sequences (SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6 or SEQ ID NO:7). Each sequence is patentably distinct because they are unrelated sequences, therefore, restriction is deemed proper and applied to each Group. For an elected Group drawn to amino acid sequence (Group I, II, III, or IV), the Applicant must further elect a single amino acid sequence for consideration. For an elected Group drawn to nucleotide sequences, the Applicant must elect a single nucleic acid sequence (see MPEP 803.04).